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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/462,695	01/12/2000	John B. Matthew		5411

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EXAMINER	
SAVAGE, MATTHEW O	

ART UNIT	PAPER NUMBER
1723	

DATE MAILED: 11/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/462,695	MATTHEW ET AL.	
	Examin r	Art Unit	
	Matthew O Savage	1723	

-- The MAILING DATE of this communication appears on the cover sh et with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 August 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

The amendment filed on 8-20-03 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the concept of utilizing copper brazing and high temperature diffusion welding for metallurgically bonding the strips to the spacers added to page 7 of the specification is considered new matter.

Applicant is required to cancel the new matter in the reply to this Office Action.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 14-21 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification fails to adequately disclose how the spacers and strips are "metallurgically bonded" to one another.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12-14, 16, 22, and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 12-14, and 16, it is unclear as to what tolerance "approximately" implies.

Claims 12, 13, 22, and 23 are considered incomplete and inoperative since no structure for connecting together the strips and spacers has been recited in the claim.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 12, 13, 16, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over German Patent 33,433 to Riedel et al.

With respect to claim 12, Riedel et al discloses a screen plate including an assembly of elongate strips 6, a plurality of spacer cross bars 1 located between the assembly of strips, the spacer cross bars having a thickness defining a width of the slots between adjacent strips (see FIGS. 4 and 8). Riedel et al fail to specify the limitation of the spacer cross bars being separated from each other at intervals approximately two to twenty times the length of the spacer cross bar and the screen plate as having an open

area of up to 27%, however, such a modification would have been obvious in order to optimize the open area and the strength of the screen for a particular application.

With respect to claim 13, Riedel et al discloses a screen plate including an assembly of elongated strips 6, a plurality of spacer cross bars 1 located between adjacent strips, the spacer cross bars having a thickness defining the width of the slots between adjacent strips. Riedel et al fail to specify the limitation of the spacers cross bars having a length four times their length, the spacer cross bars being separated from each other at intervals approximately two to twenty times the length of the spacer cross bar, and the screen plate as having an open area of up to 27%, however, such a modification would have been obvious in order to optimize the open area and the strength of the screen for a particular application.

With respect to claim 16, Riedel et al discloses a screen plate having very fine slots of selected width for screening devices including a plurality of elongate strips 6 having side edges, a plurality of elongate spacers 1 having a thickness approximately equal to the width of the slots in the screen plate, the spacers having a width equal to the width of the strips (see FIG. 4), the strips and spacers being metallurgically bonded at interconnecting surfaces. Riedel et al fail to specify the limitation of the spacers having a length four times their length, the spacer cross bars being separated from each other at intervals approximately two to twenty times the length of the spacer cross bar, and the screen plate as having an open area of up to 27%, however, such a modification would have been obvious in order to optimize the open area and the strength of the screen for a particular application.

With respect to claim 21, Riedel et al discloses a screen plate having very fine slots of selected width for screening devices including a plurality of elongate strips 6 having side edges, a plurality of elongate spacers 1 having a thickness equal to the width of the slots in the screen plate, the strips and spacers arranged alternately in a stack to define intercontacting surfaces, the spacers having a width equal to the width of the strips (see FIG. 4), the strips and spacers being metallurgically bonded at the intercontacting surfaces. Riedel et al fail to specify the limitation of the spacers as having a length less than length four times their length, the spacer cross bars being separated from each other at intervals approximately two to ten times the length of the spacer cross bar, and the screen plate as having an open area of up to 27%, however, such a modification would have been obvious in order to optimize the open area and the strength of the screen for a particular application.

With respect to claim 22, Riedel et al discloses a screen plate including a plurality of strips 6 separated by spacers 1 having a uniform length to define slots of uniform length. Riedel et al fail to specify the limitation of the ratio of slot length to spacer length as being in a range of 2-10:1, however, such a modification would have been obvious in order to optimize the open area and the strength of the screen for a particular application.

With respect to claim 23, Riedel et al discloses a screen plate including a plurality of strips 6 separated by spacers 1 to define slots of uniform width and length between the strips. Riedel et al fails to specify the limitation of the slots having a width of less than 0.005 inches or less and a length of 3 inches or less and the slots forming at least

15% of the open area of the screen plate, however, such a modification would have been obvious in order to optimize the degree of separation and open area and strength of the screen for a particular application.

Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riedel et al in view of Malm.

With respect to claim 18, Riedel et al discloses a side wall screen plate with slots parallel to an axis (see lines 7 and 8) including a plurality of elongate strips 6 having side edges, a plurality of elongate spacers 1 having a thickness approximately equal to the width of the slots in the screen plate, the spacers having a width approximately equal to the width of the spacers, the strips and spacers being metallurgically bonded at intercontacting surfaces. Riedel et al fail to specify the limitation of the spacers cross bars having a length four times their length, the spacer cross bars being separated from each other at intervals approximately two to ten times the length of the spacer cross bar, and the screen plate as having an open area of up to 27%, however, such a modification would have been obvious in order to optimize the open area and the strength of the screen for a particular application. Riedel et al fails to specify the screen plate as being in the form of a screen cylinder. Malm discloses a screen plate in the form of a screen cylinder and teaches that such a configuration enables the efficient screening of a lignocellulose containing fibrous material. It would have been obvious to have modified the screen plate of Riedel et al so as to have arranged in the form of a

screen cylinder as suggested by Malm in order to enable the efficient screening of a lignocellulose pulp material.

Concerning claim 19, Malm discloses profile bars 15 forming part of cylinder side wall.

As to claim 20, Malm discloses a cylindrical side wall having sections of between two and twenty slots in width with the sections separated by the profile bars 15.

Applicant's arguments filed 8-20-03 have been fully considered but they are not persuasive.

The rejection under 35 U.S.C. 112, first paragraph is maintained since the type of metallurgical bonding for bonding extremely thin spacers (.004 in) between relatively thick strips (.01 in.) had not been adequately disclosed in the original specification to enable one skilled in the art to make the apparatus without undue experimentation. Applicant cites the '486 Patent as evidence that such bonding procedures were well known, however, the patent does not disclose a procedure for bonding thin spacers between relatively thick strips as in the case of the instant invention.

With respect to applicant's arguments against the rejection under 35 U.S.C. 103 in view of Riedel et al, applicant argues that no reason has been presented for one skilled in the art to modify the apparatus of Riedel et al as set forth in the rejections, however, it is held that such a modification would have been obvious in order to optimize result effective variables, e.g., the open area and the strength of the screen, for a particular application (see In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977).

For example, one skilled in the art would reduce the number of spacers and/or length of the spacers in the case that open area of the screen was to be maximized. Alternatively, one skilled the art would increase the number of spacers and/or length of the spacers in order to increase the strength and rigidity of the screen in cases where such properties were more important that the open area of the screen.

With respect to applicant's argument against the rejections under 35 U.S.C. 103 over Riedel et al in view of Malm, applicant argues that Malm is not combinable with Riedel et al since Malm discloses small gap widths, however, such an argument is not deemed persuasive since Riedel et al disclose a screen that can have any gap width (see the last two lines of page 3 of the translation of Riedel et al).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O Savage whose telephone number is 703-308-3854. The examiner can normally be reached on Monday-Friday, 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda W. Walker can be reached on 703-308-0457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

M. Savage

Matthew O Savage
Primary Examiner
Art Unit 1723

mos
November 11, 2003